

# Update on Global Harmonization Activities and NextGen/SESAR Efforts



Carey Fagan  
JPDO All Hands meeting  
February 28, 2008



# Global Harmonization Working Group

## Briefing Outline

- **Part I**

- ✓ Organizational Structure
- ✓ Membership
- ✓ Accomplishments to date
- ✓ Goals for FY 2008

- **Part II**

- ✓ NextGen and SESAR harmonization efforts

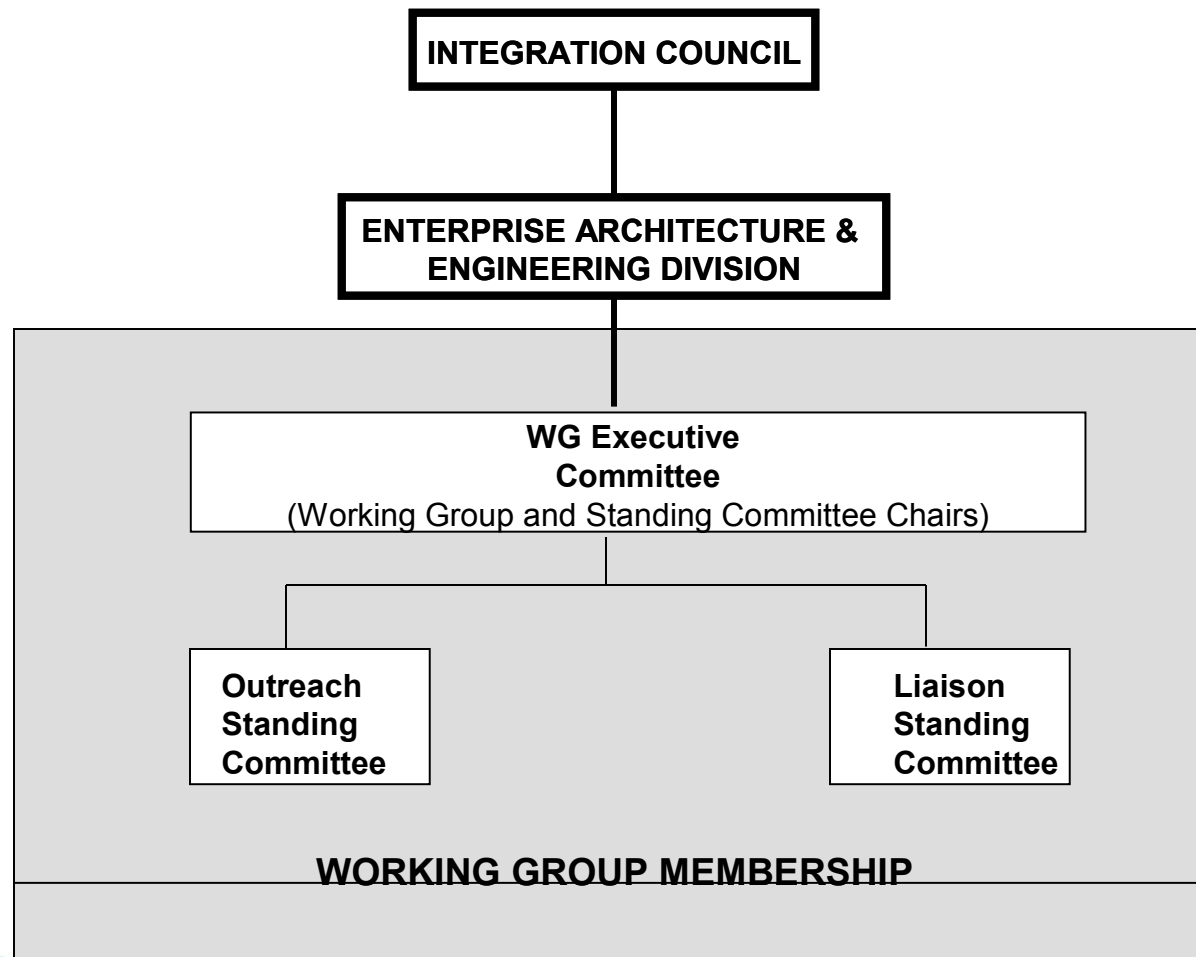


# Part I

- ✓ **Organizational Structure**
- ✓ **Membership**
- ✓ **Accomplishments and Goals**



# Global Harmonization Working Group Organizational Structure



# Global Harmonization Working Group Membership

- **Government:**
  - **Carey Fagan, FAA**
  - **Angela Harris, FAA**
  - **Jonathan Alvear, DOC**
  - **Steve Albersheim, FAA**
  - **Phil Basso, DOD**
  - **John Koelling, NASA**
  - **Ken Ward, FAA**
- **Industry:**
  - **Mike Marsili, Lockheed Martin**
  - **Celia Fremberg, Mitre**
  - **Bernard Gonsalves, IATA**
  - **Thomas Holford, Boeing**
  - **Dave Behrens, IATA**
  - **Jim Byrum, Cessna**
  - **Bruno Ayrat, Thales**
  - **Chris Francis, L-3**
  - **Alex Pufahl, Jeppesen**
  - **Chris Benich, Honeywell**
- **Contract Support:**
  - **Fernando Pinzon, BAH**
  - **Aurelie Carron, CS**
  - **Jesse Lambert, CS**





# Global Harmonization Working Group Membership

- Industry (con't):
  - **Rick Heinrich, Rockwell Collins**
  - **Steve Brown, NBAA**
  - **Andy Taylor, QinetiQ**
  - **Tony Keane, Raytheon**



# Global Harmonization Working Group Membership

- Liaison Standing Committee:
  - **Security:** Jonathan Alvear
  - **Aircraft:** Rick Heinrich
  - **ANS:** Andy Taylor
  - **Weather:** Steve Albersheim
  - **Net centric:** Chris Francis and Tom Holford
  - **Environment:** Steve Albersheim
  - **Airports:** John Koelling
  - **Safety:** Ken Ward, Rick Shay
- Outreach Standing Committee:
  - Celia Fremberg
  - Jesse Lambert
  - Ken Ward
  - Bernard Gonsalves
  - Tom Holford
  - Dave Behrens
  - Jim Byrum
  - Phil Basso
  - Bruno Ayrat
  - Jonathan Alvear
  - Chris Francis



# Global Harmonization Working Group Accomplishments & FY08 Goals

- **China: February 2008 signed MOU with ATNB**
  - NextGen Workshop planned April 14-18, 2008
- **Japan: Future Air Transportation Systems**
  - Signed agreement with Japan Civil Aviation Bureau 2006
  - Comparison of NextGen/SESAR/CARATS
- **Singapore Air Show February 2008**
  - Announced ASPIRE (similar to AIRE for Europe)
- **US/Canada/Mexico (NextGen Trilateral Strategy Group)**
  - Agreed on areas of harmonization
  - Building roadmaps to harmonize NextGen key capabilities
- **Europe**
  - FAA/EUROCONTROL Technical Interchange Meetings
  - AIRE Initiative and Trials
  - ICAO NextGen/SESAR Forum





# Global Harmonization Working Group Accomplishments

- **Established NextGen/SESAR Conops Comparison Study Team**
  - **Members from ANS, Safety, Environment, Aircraft WG and EAED**
  - **High level review**
  - **Results published in JPDO White Paper (March 2008)**



## Part II

# NextGen and SESAR Harmonization Efforts



# Harmonize: a Symmetrical Relationship

- **Harmonize what?**

- **Requirements:** users should express them
- **Solutions & deployment:** subject to local needs and transition from different legacy situations
- **Methods:** CBA, validation (E-OCVM), architecture, ....
- **Governance:** 1 Vs ~40 states; industry Vs government

Is harmonization enough?

# Differences between the US & Europe

- **MARKET**

- General Aviation
- Military Aviation

- **TRAFFIC Volume**

- **WEATHER**

- VMC / IMC
- Severity

- **CULTURE & POLITICS**

- Number of States
- Diversity of Culture
- Diversity Language
- Political Intervention

- **ATM SERVICE**

- Number & governance of Service Providers
- Source of Finance

- **ATM SYSTEM**

- Uniformity / fragmentation
- Automation
- Age
- Procurement Rules
- Domestic Preferences



# Similarities between the US & Europe

- **SAME PRESSURES**

- Maintain Safety
- Accommodate Growth
- Eliminate Restrictions
- Contain Costs

- **SAME COMMERCIAL CUSTOMERS**

- Same Airlines
- Same Aircraft
- Same Avionics
- Same Pilots

- **SAME OBLIGATIONS**

- Chicago Convention
- ICAO SARPS

- **SAME CONSTRAINTS**

- Political Visibility
- Environmental Pressures
- Financial Constraints
- Security demands

- **SAME OPPORTUNITIES**

- High Competence (Technical & Operational)
- Advanced Technology





# Targets for NextGen & SESAR Cooperation

- **Ensure same aircraft can fly in both systems**
- **Ensure common standards are available in time**
- **Minimize costs by sharing results & efforts**
- **Enable manufacturers to compete & supply both markets**



# FAA-EUROPE Cooperation

- **FAA/EUROCONTROL Action Plans**
  - R&D
  - Concepts
  - Technical
  - Operational
  - Safety
- **AIRE**
- **CANSO Seamless Airspace Work Group**
- **FAA/JPDO/ECTL/EC/JU Senior Executive Mtg**
- **ICAO NextGen/SESAR Forum**



# Conclusions for NextGen/SESAR Cooperation

THE SYSTEMS CANNOT BE COMPLETELY IDENTICAL  
**BUT**

THEY MUST BE CLOSELY ALIGNED

TRANSATLANTIC COOPERATION IS ESSENTIAL  
**BUT**

IT MUST BE TARGETED



# Questions?

